

8. Upper Alum Shales.

9. Upper Nummulite Limestone with flints.

10. Tertiary Miocene strata with the usual fossils.

A. A. (a.) a fault occurs to the South, of which at the entrance of the Pass the beds, 3, 4, 5, 6, 7, 8, 9 and 10, are seen in reversed order. The nummulite limestone and oolitic strata are much shattered and compressed, the strata of the former being often remarkably contorted.

#### TABLE No. X.

Sketch of a slab of carboniferous limestone from Musahkhail in the Salt Range, containing Orthoceratites and Ceratites.



*Catalogue of Reptiles inhabiting the Peninsula of India.*—By T. C. JERDON, Esq. *Madras Medical Service.*

### CHELONIA.

Fam. TESTUDINIDÆ—or Land Tortoises.

Gen. TESTUDO.

Fore feet with 5 fingers, hind do. with 4 nails—Carapax of one piece—Sternum fixed in front.

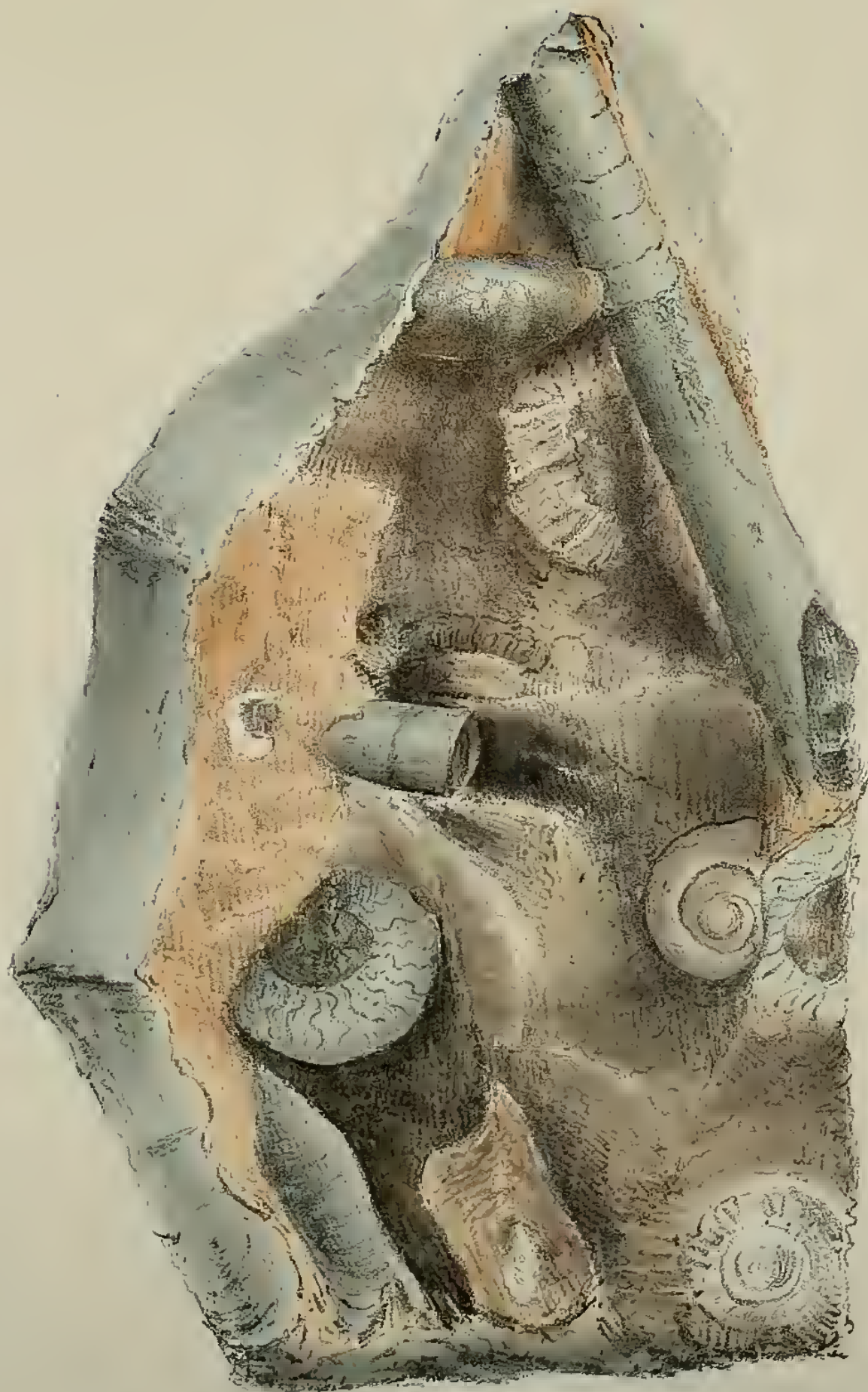
TESTUDO ACTINODES, Bell.

Syn. *T. stellata*, Schw. and Gray—*T. geometrica*, Daud. and Shaw—*T. elegans*, Schœpf. and Shaw—*T. geometrica* apud Hutton, *J. A. S.* VI. 689, and plate XXXVIII.—*Kaynchwa*, H.—*Dasari*, Tambel, Teloo; vulgo *Adavi Moonigadoo*, or Jungle deaf-fellow—Indian Land Tortoise.

This Tortoise is tolerably common in the low jungles of the Carnatic, and I believe throughout the whole of the Peninsula. Length of the shell of one about 6 inches.\*

\* Capt. Thos. Hutton gives much larger dimensions *loc. cit. supra*; and we have a specimen which I picked up dead in a street of Calcutta, the length of carapax of which (in a straight line) exceeds 12 inches. Three living specimens which I received from Vizagapatam 5 or 6 years ago, certainly did not grow much in the interim, and the carapax of one of these recently dead, and added to the Society's museum, measures  $8\frac{1}{2}$  in. It also inhabits Ceylon; but not Lower Bengal.—E. B.

TABLE N°X.



ORTHO CERATITE WITH CERATITES  
IN A SLAB OF CARBONIFEROUS LIMESTONE  
FROM MOOSAKHAIL IN THE SALT RANGE.

PUNJAB.

March ..... 1852.

*(C. J. Fleming)*



Fam. ELODIDÆ—or Marsh Tortoises.

Gen. EMYS.\*

EMYS TRIJUGA, Schw.

Syn. *E. Belangeri*, Lesson—*Goonta*, Tamber, Tel.

Carapax olive or brown, three-keeled, edges smooth.

By no means common in the south of India, and chiefly to be found in deep tanks and large wells.†

Length of shell of one 8 inches.

[Col. Sykes procured another EMYS in the Bombay Dukhun, *E. TENTORIA*, Gray, *P. Z. S.* 1834, p. 54, and the supposed adult *E. TECTUM* of Hardwicke's 'Illustrations.' The Society's museum contains an adult procured by Sir A. Burnes in Sindh, and we have also a young specimen from the river Hughly. The species is most nearly affined to *E. TECTUM*, Bell, and has the same peculiar form of the fifth vertebral plate; but the fourth is quadrilateral and elongate, the third has a broad transverse posterior margin, the keels of the vertebral plates (especially that of the fourth, so developed in *E. TECTUM*), are much less prominent at all ages, the entire carapax is broader and flatter, and the abdominal plates are brown-black with pale margins, and occasionally one or two pale central spots,—instead of whitish, with two or three strongly contrasting blackish marks on each, as in *E. TECTUM*. Carapax of adult 7 in. long; that of adult *E. TECTUM* 6½ in.

I am nearly certain that the small specimen is from the vicinity of Calcutta, and that I kept it alive for some time, but did not then distinguish it from *E. TECTUM*. Three species of restricted EMYS are extremely common in the neighbourhood of Calcutta, viz. *E. TECTUM*, *E. HAMILTONII*, Gray, (of which the carapax of our largest specimen measures 5½ in. in a straight line,) and *E. THURGHII*,

\* For generic characters, vide Journ. As. Soc. 1847, p. 608. I think it superfluous to repeat in this Journal the characters so lately laid down in Dr. Cantor's most admirable Catalogue.

† Hab. also Central India (vicinity of Chaibasa); but in Ceylon it appears to be replaced by *E. SEBÆ*, Gray. According to M. M. Dumeril and Bibron, M. Dussumier procured a young individual in a lake near Calcutta (doubtless the salt-water lake); but we have never heard of another instance, although we have seen multitudes of *Emydes* from the salt-water lake and its vicinity.—*Cur. As. Soc.*



Gray, which attains to a much larger size than the others, though adults are not often obtained. Carapax of adult from 20 to 22 in., in a straight line. *Cur. As. Soc.*]

Fam. POTAMIDÆ—or River Tortoises.

Gen. CRYPTOPUS—Dum. and Bibr.

Carapax with a narrow cartilaginous border—sternum wide, flexible in front and behind, and able completely to conceal the extremities.

CRYPTOPUS GRANOSUS—Dum. and Bibr.

Syn. *T. granosa* Shæpf.—*T. granulata*, Daud. and Sh.—*Trionyx coromandelicus*, Mesc., Geoff., Less.—*Emyda punctata*, Bell and Gray.—*Tambel* and *Goorada gadoo*, Tel. Shagreen fresh-water Tortoise.

This is an extremely common species in the south of India, and is found in tanks, rivers, wells, and pools of water, burying itself in the mud with great celerity. It is frequently brought to the Madras market and is eaten by many of the people there.

Length of shell of one,  $8\frac{1}{2}$  inches—but it becomes much larger.\*

Gen. GYMNOPUS—Vide Cantor, l. c. p. 614.

GYMNOPUS CARTILAGINEUS—Vide Cantor, l. c. p. 615.

I have observed this species in the Godavery, the Beena and other rivers of the north west of the peninsula, but have no specimen at present.

GYMNOPUS INDICUS, (Gray), Vide Cant. l. c. p. 616.

I have very lately procured a specimen of this large river Tortoise taken in a net at Mahé on the Malabar Coast, where, however, it is considered rare.

Length of carapax 30 inches.†

Fam. THALASSIDÆ—or Sea Turtles.

Gen. CHELONIA—Vide Cantor, l. c. p. 617.

CHELONIA VIRGATA—V. Cant. l. c.

I have procured this Turtle on the East Coast of India.‡

CHELONIA MACULOSA—Cuvier.

\* Extremely common in Lower Bengal, and here also much eaten by certain classes, as indeed are all other *Testudinata*. It likewise inhabits Ceylon.—*Cur. As. Soc.*

† We have succeeded in obtaining only one small specimen of this in the vicinity of Calcutta.—*Cur. As. Soc.*

‡ Very numerous on parts of the E. coast of the Bay of Bengal.—*Cur. As. Soc.*

Vertebral plates larger than broad, marked with yellow in an olive-brown ground.

This Turtle is occasionally caught by the fishermen both on the East and West Coasts of India.

CHELONIA OLIVACEA, ESCHSCHOLTZ—Cant. l. c. p. 619.

Very common in the Bay of Bengal, where I have seen many captured by ship lascars swimming out during a calm. Length of carapax average about 2 feet.\*

CHELONIA IMBRICATA (L.) V. Cantor, l. c. p. 619.

I have quite recently procured this Turtle at Tellicherry on the Malabar Coast.†

CROCODILIDÆ,—Bon.

Gen. CROCODILUS—V. Cant. l. c. p. 621.

CROCODILUS PALUSTRIS, Lesson—V. Cant. l. c. p. 621.

This Crocodile, pronounced by some erpetologists only a variety of the Crocodile of the Nile, and so considered by Cantor, is very common in all the rivers and back-waters of Malabar and the West of India, very rarely seen out at sea. I have not seen it from the East Coast. It does not attain the dimensions of the next species, and is considered very harmless by the natives.

CROCODILUS POROSUS—Schn. Cantor, l. c. p. 622.

This, the larger and fiercer of our two Crocodiles, is found in various localities both on the East and West coasts, and is the species so abundant in the fort ditch at Vellore. It is of very rapid growth. An egg brought from Vellore to Walter Elliot, Esq., was hatched in the Government house compound, and in eight years had increased to the length of 8 or 9 feet, becoming so powerful as to destroy a full grown buck Antelope which had come to drink water at the tank where it usually resorted to.

I may mention, here, that both of these species of Crocodile are almost universally called Alligators by the English in India; erroneously so, of course, as no Alligators have as yet been found in the old world.

\* Abundant at the mouth of the Hughly.—*Cur. As. Soc.*

† In the Society's museum is a small specimen, procured in one of the Sunderbund rivers.—*Cur. As. Soc.*

Fam. CHAMÆLEONIDÆ.

Gen. CHAMÆLEO, Laurenti.

Feet thin with 5 fingers joined to the nails into two lobes, one of two, the other of three fingers. Skin granular. Eyes large, covered by the scales of the eyelid except one small round aperture. No visible tympanum.

CHAMÆLEO ZEYLONICUS—Laur.

Dorsal crest short; abdominal crest with the spines long and somewhat distant. Colour green.

Syn. *C. vulgaris*, var. B, Dum. and Bibr.—*C. zebra*, Bory de St. Vinc.—*C. calcaratus*, Merr.

I have no hesitation in considering this Chameleon distinct from the African one, as well on account of the slight but permanent structural distinctions (the abdominal ridge being in the African one composed of very short and closely set spines), as the difference of locality, and the great difference in the change of colour of the two. In our Indian one, the only change produced is from one shade of green to another. In a state of quiescence, it is usually very pale green, sometimes dark blackish green; but when excited it is mottled or *zebra'ed* very prettily with dark transverse blotches on a pale ground. I never saw any pure yellow, or red in any state.\* It is found in all the wooded districts of India. It is used in medicine by some of the native doctors, and many generally be procured in the Madras market.

Length of one 10 inches, of which the tail is more than half.

CHAMÆLEO PUMILUS—Latreille.

Head tuberculated; dorsal crest continued over the tail. Some large circular scales mingled with the small and unequal granulose ones.

I possess a specimen of this small Chameleon in spirit, which was said to have been taken near Coonoor on the Nilgherries.

Length  $5\frac{1}{2}$  inches, of which the tail is nearly 2.

Fam. GECKONIDÆ,—Bonaparte.

Gen. HEMIDACTYLUS, Cuvier, Cantor, l. c. p. 628.

HEMIDACTYLUS TRIEDRUS—Daud.

\* A very fine one which we long kept, assumed a tolerably pure yellow ground-tint occasionally, with black markings.—*Cur. As. Soc.*

Many large triedral tubercles mixed with the other scales—tail somewhat rounded—several large transverse brown bands marked with large white triedral scales—7 or 8 femoral pores in each thigh in the males.

Syn. *Deowur bullee*, Tel., of the Yanadees.

This very handsomely marked Gecko is rarely found in houses, being chiefly met with in jungly places, on rocks and trees, in all parts of the country, but is nowhere common.

Length of one 7 inches, of which the tail is about half.

HEMIDACTYLUS SUBTRIEDRUS—n. sp.?

H. TRIEDRUS—var.?

*Sookha bullee* of the Yanadees.

Differs from TRIEDRUS in somewhat shorter head, in the scales of the throat and muzzle being smaller in its shorter head; fewer dark bars on the back and fewer of the white tubercles; and in the triedral scales generally being smaller. It is equal in size to TRIEDRUS, and the number of femoral pores is the same. Colours much as in TRIEDRUS but paler.

Length of one  $6\frac{1}{2}$  in. of which the tail is more than half.

The Yanadees, a peculiar jungle race in the Nellore district, who have a considerable knowledge of reptiles, pronounced this to be a distinct species from the last, and gave it a peculiar name, or I should have put it down as a casual variety of TRIEDRUS without closer inspection. It is found chiefly in rocks, seldom entering houses. It forms a link between TRIEDRUS and MACULATUS.

HEMIDACTYLUS MACULATUS—Dum. and Bibr.\*

Brown or olive-green with dark marks; back furnished with numerous subtriedral tubercles. This is the most common species of Gecko in the South of India, but never attains here the dimensions stated by Dumeril and Bibron. It is very subject to variation both in the ground-tint and the dark markings, which it appears to have the power of deepening or reducing. Length of an average specimen  $4\frac{1}{2}$  inches, of which the tail is  $2\frac{4}{10}$ ths.

HEMIDACTYLUS PUNCTATUS—n. sp.

Back with some larger conical scales, and sub-caudal scutæ very large; scales of abdomen dotted, brown above; limbs and tail reddish

\* Qu. H. FRÆNATUS, D. and B.? *Cur. As. Soc.*



with dark bands: a pale yellow streak from muzzle to tail bordered beneath by a dark line; another dark line from nostrils to behind the eye—beneath yellowish white—some of the sub-caudal scutæ orange.

Length  $3\frac{2}{3}$  inches, of which the tail is  $1\frac{1}{2}$ .

I procured a single specimen of this small Gecko lately, in a house at Tellicherry. At first glance, I took it for *maculatus*. It appears very similar to *H. frenatus*, but I can find no pores, and the thumb appears as well developed as in *maculatus*.

HEMIDACTYLUS LESCHENAULTII—Dum. and Bibr.

Small tubercles scattered sparingly among the very small scales of the back, 13 femoral pores in each thigh. Adult pale grey above; young with dark markings and tail annulated black and white.

Length of one nearly 6 inches, of which the tail is  $2\frac{8}{10}$ ths.

This species of Gecko is very common throughout the South of India in houses. I have not observed the mode of coloration described by Dumeril and Bibron.

[Gen. HOMONOTA,—Gray.

*H. FASCIATA*, nobis. Body covered above with large, imbricated, keeled and pointed scales, below with much smaller hexagonal scales ranged in oblique series: the throat and limbs studded with minute hexagonal scales, larger on the thighs; and the head uniformly covered with hexagonal plates, smaller than the scales of the back. A range of simple labial plates above and below, the rostral larger, bordered on the lower jaw with a series of small oval plates, and these with a second series of smaller oval plates. Tail wanting in the specimen. The pupils appear to be round. Colour plumbeous-brown, with 7 or 8 irregular broad whitish cross-bands, formed each of three or more contiguous spots. An omega-like mark on the forehead. Length of head and body  $1\frac{1}{2}$  in., of head  $\frac{3}{8}$  in., This specimen was sent many years ago to the Society's museum by Mr. Jerdon. *Cur. As. Soc.*]

Genus GYMNODACTYLUS—Wiegman—Vide Cantor, l. c. p. 631.

GYMNODACTYLUS INDICUS,—(Gray).

Scales of body and tail small, equal; those beneath the tail larger.

Syn. *Goniodactylus indicus*, Gray.

This species, lately\* described from specimens sent home by myself, is found on the Nilgherries, concealing itself under stones in the day time. I have procured it on the top of Dodabetta, the highest mountain of the group, and have also found it in Coorg. Its colours when fresh are a mottled brown, or greenish-brown, with a row of orange-yellowish spots along the back edged darker, and a line of similarly coloured spots on each side; lips also of the same tint, and the lower portion of the tail.

Length of one  $2\frac{4}{10}$  inches, of which the tail is  $1\frac{2}{10}$ th.

*GYMNODACTYLUS MALABARICUS*—n. sp.

Scales of the back uniform, small, granulose, a few at the root of the tail between the two hind legs smaller, those in the tail above larger, imbricated; a few small spines at the root of the tail: dark brown above, marbled with black spots and a white spot on the nape.

Length of one  $2\frac{4}{10}$  inches, of which the tail is about half.

I have only very recently procured this small Gecko from the forest of Malabar, where it frequents large trees and rocks. It is generally to be found on those large trees, whose base is protected by buttresses, in the inequalities of which it finds a secure retreat, and occasionally it hides itself under a cleft in the bark. The dark markings on its back are edged lighter, and it is of a bluish white colour beneath. It is of a more slender habit than the preceding species.

*GYMNODACTYLUS LITTORALIS*—n. sp.

Very slender form, scales of back small, equal; those on the muzzle larger; beneath the tail a series of large six-sided scales. Colour pale brown, with a series of paler marks along the back and tail, a black spot on the nape, the chin and throat pale yellow.

Length  $2\frac{3}{10}$  inches, of which the tail  $1\frac{2}{10}$ th.

I procured a single specimen of this well marked species of Gecko in a ware-house on the Sea Coast in Malabar, and have not yet been fortunate enough to find another.

*GYMNODACTYLUS MYSORIENSIS*—n. s.

Scales of the back uniform, granulose, with 2 or 3 rows of spines on each side, and on the tail; tail beneath with a triple series of large unguiform scutæ.

\* *Ann. and Mag. of Nat. Hist.*, Dec. 1846, p. 429.

Head and back covered with small granulose scales, and two or three distant rows of spines on each side and extending along the tail; chin and throat covered with small hexagonal scales, gradually changing to rounded imbricated scales which cover the abdomen; scales of tail imbricate, with 3 rows of larger nail-shaped scutæ beneath; scales of the basal joints of the fingers and toes, enlarged, nail-shaped.

Body above greyish-brown, with a light stripe down the centre of the back, and a series of dark brown marks on the head, back and sides; legs and feet banded; beneath bluish-white; chin, throat, and anterior portion of palpebræ bright yellow.

Length of one  $2\frac{1}{2}$  inches, of which the tail is  $1\frac{1}{4}$ .

I have quite recently found this small and very distinctly characterized species of Gecko at Bangalore, frequenting rocks and also entering out-houses. The young has the tail flesh-coloured: 2 femoral pores on one side and 3 on the other.

Fam. IGUANIDÆ.

Gen. CALOTES, Cuv. Vide Cant. l. c. p. 636.

CALOTES VERSICOLOR, (Daud.)

Two spines on each side of the nape. No fold on the neck.—Tail conical. Scales large, keeled.

Syn. *Agama Tiedmanni*, Kuhl.—*A. vulturosa*, Harl.

This is the most common and extensively distributed lizard in the country, being found everywhere in gardens, avenues and jungles. Though not a Chameleon in structure, it is yet one in habit, and much more so than our Chameleon. Its usual tints are a pale drab or fawn colour, but this it changes to bright red, to black and to a mixture of yellow red and black. This change is sometimes confined to the head, at other times diffused over the whole body and tail. A common state to see it in, is seated on a hedge or bush with the tail and limbs black, head and neck yellow picked out with red, and the rest of the body red. I am inclined to think that this display of colours is merely seasonal. It only occurs in the males, the females being uniformly and plainly coloured. The young has a pale band on each side of the body from the eye to the tail, and a series of dark bands on the back. Mr. Blyth mentions, in a notice of this lizard in the Journ. As. Soc. for 1842, p. 870, that its usual colour

is \* \* \* \* . This is somewhat remarkable and I should doubt if it was the same species. Are the changes mentioned here observed in Calcutta?\*

This and the other species of *Calotes* are essentially tree lizards, seeking their prey often on the ground, but always retreating up trees when in danger.

Length of one specimen 18 inches, of which the tail is 12.

*CALOTES NEMORICOLA*, nov. spec.

One detached spine in front of 2 or 3 small ones on each side of the nape. A fold of skin on the shoulder, scales of the sides very large, not keeled, those of the abdomen much smaller, keeled. Dorsal crest extending only about one-third along the back; colour green.

I only procured one specimen of this lizard near the foot of the Coonoor ghât of the Nilgherries. Compared with *versicolor*, the large smooth scales are the most prominent feature of distinction. The scales at the base of the tail above are of rather large size, keeled and pointed. The tympanum is large: where the dorsal crest terminates, the scales of the ridge are pointed.

Length of my specimen 18 inches, of which the tail is 8.

*CALOTES ROUXI*—Dum. and Bibr.

An oblique fold in front of each shoulder. Scales of the sides small, nearly as large as those of the abdomen. Base of the tail above furnished with much larger scales, somewhat angular. Colour pale brown with darker bands.

I have lately procured from the forests of Malabar a species of lizard, which appears to correspond with the description of *C. Rouxi* from the Burmese country. I found it more abundant than elsewhere in a small wooded island known as Pigeon I., about 20 miles

\* I never saw any yellow in a Bengal specimen; and some which Dr. Kelaart sent me alive from Ceylon were perfectly identical with the Bengal reptile. It is chiefly during the months of May and June that the species here displays its fine colours; which generally are—head and neck, and more or less of the fore-part of the body, bright red; rest of body and limbs dark greenish-brown; and a great black patch on the shoulder. The female is smaller, and deposits her 8 to 16 eggs very commonly in a flower-pot, burrowing 4 or 5 in. into the hard dry soil, and finally covering them up most carefully, so that no appearance remains of the ground having been disturbed. The young appear in about 8 or 9 weeks. I have seen a two-thirds grown lizard of this species carry off and partly swallow a *Scolopendra* nearly of its own length.—*Cur. As. Soc.*



S. S. W. from Honore. The usual change of colour consists in the head and nape becoming brick red, and the rest of the body blackish.

Length of one 11 inches, of which the tail is  $7\frac{3}{4}$ .\*

*CALOTES VIRIDIS*, Gray.

Nape with 2 isolated spines above the ears; a high crest on nape and shoulders diminishing along the back and lost on the root of the tail, scales large above, smaller beneath, those at base of the tail largest. I always considered that the very pretty green lizard which I had procured from Travancore and the southernmost portion of Malabar agreed tolerably exactly with the description of *C. ophiomachus*, but Mr. Gray has described it as new by the name of *viridis*.†

The colour is a bluish-green with 4 or 5 transverse stripes of reddish white, and some of the scales of the throat are edged with orange.

Length of one  $16\frac{1}{2}$  inches, of which the tail is nearly 13.

*CALOTES OPHIOMACHUS*.

A small crest of long spines on each side of the nape. Dorsal crest extending to the root of the tail, which is long, conical, and very thin towards the end. Green; with transverse bands.

Mr. W. Elliot possesses a rough drawing and brief description of a green lizard, distinct from any of those previously described, which I believe to be identical with the *C. ophiomachus* of authors. He procured the specimen in Dharwar. Its dimensions were as follow:

Length 14 inches, of which the tail is 10.

The drawing represents the colours to be pale green with dark transverse bands, interrupted by a pale longitudinal line from ear to tail.

Gen. *SALEA*, Gray.

Differs from *Calotes* in the series of scales pointing directly back-

\* This coloration is altogether dissimilar from that described of my supposed *C. Rouxi* from Newera Elia, vide *J. A. S.* XXI, 354.—*Cur. As. Soc.*

† *Ann. Mag. Nat. Hist.* XVIII, page 429. [There appears to be some confusion here. The present species we consider to be, decidedly, *C. ophiomachus*, as figured by Daudin; and its range extends to Ceylon and to the Nicobar islands. The *C. viridis*, Gray, was long ago presented by Mr. Jerdon to the Society, and it does not correspond with Mr. Jerdon's present descriptions, either of this or of the next species; yet his figure sent of the supposed *OPHIOMACHUS* would seem to represent *C. viridis*.—*Cur. As. Soc.*]

wards, or running in longitudinal lines ; not as in *Calotes*, where the points are directed upwards, nor as in *Bronchocela*, where they are directed downwards.

SALEA JERDONI, Gray.

Nuchal and dorsal crest formed of elongated compressed scales ; tail with a keeled crest.

This pretty lizard, described by Mr. Gray from specimens sent home by me, is only found in the Nilgherries where it frequents bushes, hedges and gardens. Its colour is a bright grass-green marbled with brown, some red marks on the head and nape, and a few white scales on the sides. It does not appear to possess the faculty of changing its colours.

Length of one  $9\frac{1}{2}$  inches, of which the tail is  $6\frac{1}{2}$ .\*

Gen. SITANA, Cuv.

Four toes on the hind-feet, no dorsal crest, a large dewlap in the males.

SITANA PONTICERIANA, Cuv.

Fawn-coloured, with rhomboidal dark spots on the back, and a pale longitudinal streak from ear to tail. Male, in breeding season, with a large tricoloured dewlap.

This common ground lizard is distributed over all India, I believe, but is rare in the wooded districts, frequenting the open country, fields and low copses : on the approach of danger, it runs with great rapidity, tail erect, and conceals itself in any crack in the ground or hole, or under a stone or bush. Notwithstanding its activity, it is the common prey of harriers, buzzards, hawks and eagles. I have not seen the beautiful dewlap (blue black and red) developed in the south of India, nearly to the extent that appears to take place in the north, and there it attains a greater size. The colours

\* Hab. also Ceylon (Newera Elia), whence a specimen was presented by Dr. Kelaart to the Society's Museum, since purloined together with a *SALEA* from the Nicobars. Another, from Mirzapore (?), presented by the late Major Wroughton, may be described as.

*S. GULARIS*, nobis. Length  $16\frac{1}{2}$  in., of which the tail measures  $11\frac{3}{4}$  in. Structure typical. Hind-limb reaching to the articulation of the lower jaw. Series of 14 lengthened spines from occiput to behind the shoulders, increasing in length to the 7th and 8th, and then successively diminishing. Gular fanon, or dewlap, well developed. Two inconspicuous ridges of slightly lengthened spines above the tympanum.—*Cur. As. Soc.*

of the dewlap are only exhibited during the pairing season, and it then becomes larger than previously. At this time, too, some blue marks are observable on the nape and back, that on the nape indeed forming a kind of crest more conspicuous now, the colours in general too are deepened, and the quadrangular marks on the back and barring of the limbs very distinct. The name *Sitana*, said by Cuvier to be the name by which it is known at Pondicherry, is a Latin termination of the word *Shaitan* or Devil, a name sometimes applied to it by the Musulmans of S. India.

Length of one  $6\frac{3}{4}$  in., of which the tail is  $4\frac{5}{8}$  in.

Gen. DRACO, *Linné*—Vide Cant. l. c. p.

DRACO DUSSUMIERII—Dum. and Bibr.

Anterior and posterior angles of each orbit edged by a small pointed horn ; grey, wings marked black and red.

This very beautiful little lizard is only found in the forests of the West Coast, or rather in the neighbourhood of the forests, for it frequents cocoa-nut and betel-nut plantations in their vicinity chiefly, not living, it is alleged, in the woods themselves, nor in the gardens at any distance from the forest. It is tolerably common in all Malabar, Cochin and Travancore, but not known farther North than Malabar, being either unknown or very rare in Canara.

The colour of the body is a delicate grey with some darker markings, which the animal occasionally renders very distinct, at other times obscures entirely. It sometimes also changes its whole hue to a dark blackish grey. The ground colour of the wings is red marbled with black and edged with yellow. The small dewlap is pale yellow marbled with green at the base. This I may remark is never extended forwards to the extent usually seen in stuffed specimens, being merely brought forward now and then to the edge of the chin, and in a flat state not distended with air. The two lateral appendages of the head, also, are merely slightly raised now and then, and never distended in the manner seen in dried specimens.

Gen. AGAMA—Daudin.

Head short, triangular ; nostrils near the muzzle : 2—5 incisive teeth in upper jaw ; a longitudinal fold beneath the throat and another across the neck. Tail compressed, conic. Anal pores.

## AGAMA DORSALIS—Gray.

Nostrils small, somewhat tubular; occipital plate very small, simple; a small group of spines behind the ear, which is large. Dorsal crest almost wanting; scales above small, equal, keeled, those beneath smooth.

This large rock lizard is only partially distributed in Southern India, and is only found at some elevation above the sea. It is most abundant in Mysore, and especially so in the neighbourhood of Bangalore, where it may be seen on every bare rock about. It is also not uncommon on the edges of the Nilgherries up to the height of nearly 6000 feet. Its normal colour and that of the female at all times is a dusky grey with dark markings. The male can assume a very bright livery, viz. fine vermilion red above, with a streak through the eyes; under surface, limbs and tail black: occasionally the red is exchanged for yellow. It frequents bare rocks only, and retreats into holes and clefts on the approach of danger.

Length of a fine male 16 inches, of which the tail is  $10\frac{1}{2}$ .\*

Fam. VARANIDÆ.

Gen. VARANUS—Vide Cantor l. c. p. 633.

VARANUS DRACÆNA—L. (*Query* Linné?)

*Tupin. bengalensis*, Daud.—*V. guttatus*, Merr.—*V. argus*, Merr.—*Tup. cepedianus*, Daud. and Kuhl.—*V. punctatus*, Merr. and Less.—*Mon. gemmatus*, Guer. Ic. R. A.—*V. Bibroni*, Blyth, *J. A. S.* 1842, p. 869.

Nostril situate exactly between the eye and muzzle. Tail compressed with a strongly dentated ridge.

This species of Monitor appears generally spread throughout the whole of India. It is chiefly nocturnal in its habits and frequents jungly places. It is by no means confined to the neighbourhood of water, though perhaps it prefers such a locality. It defends itself most vigorously by striking with its tail. It can climb well both trees and walls, and it is popularly believed, that thieves make use of it to effect an entrance into a building or over a wall by allowing the guana to get hold by its fore-claws of the window sill or wall and pulling themselves up by it. It is eaten by the natives, who

\* The Society possesses a specimen from Pind Dadun Khan, presented by W. Theobald, Esq., Junr.—*Cur. As. Soc.*



consider it highly nourishing and aphrodisiac, and many Europeans use it for soup, imagining it allied to the West Indian Guana. It can always be procured in the Madras market.

Length of one 44 inches, of which the tail is 25.\*

Fam. LACERTIDÆ.

Gen. CALOSAURA—Dum. and Bibr.

Maxillary teeth simple and tricuspid. Nostril placed on the *canthus rostralis*. A small fold of skin in front of the shoulder; abdominal scutæ quadrilateral, smooth, placed in longitudinal bands; 5 fingers and 5 toes; tail square at the root, round for the rest of its extent.

CALOSAURA LESCHENAULTII—Dum. and Bibr.

Dorsal scales rhomboidal, keeled; six rows of longitudinal scales on the abdomen.

Reddish brown above, pale yellow beneath, sides dark brown with 2 pale yellow bands, tail red.

Length of one  $5\frac{2}{10}$ th in. of which the tail is  $3\frac{1}{2}$ .

This pretty little ground lizard is somewhat locally distributed. I have seen it in the Salem and Coimbatore districts only, especially near the banks of the Cavery. It frequents bushy ground, hedges of Euphorbia and clumps of Cactus, under which it rapidly takes shelter, as also among rocks.†

Gen. ACANTHODACTYLUS—Fitz.

One naso-rostral plate, ventral lamellæ quadrilateral, smooth. Fingers and toes compressed, toothed.

ACANTHODACTYLUS NILGHERRENSIS—n. s.

Anterior edge of ear toothed scaly, collar transverse, scales of back somewhat larger behind than in front, an occipital plate.

This lizard, apparently belonging to a genus new to India, was

\* The largest specimen in the Society's museum measures 52 in.; and our largest of *Hydrosaurus salvator*, (Laur.), 78 in., or exactly the same as that of *H. giganteus*, Gray, in the British Museum. *Empagusia flavescens*, Gray, our third common Monitor of Lower Bengal, we have not known to exceed 3 ft. in length. The Society has lately received a large specimen of *Hydrosaurus salvator* from Ceylon; and *Empagusia flavescens* likewise inhabits the Indus territories.—*Cur. As. Soc.*

† The Society's Museum contains examples of what we take to be this species from Pind Dadun Khan, in the Punjab Salt Range; and formerly possessed the same from Afghanistan.—*Cur. As. Soc.*

obtained by W. Elliot, Esq. on the Nilgherries near Coonoor. I have not myself been fortunate enough to observe it, and know nothing of its haunts. Its colours in spirit are of a pale pearl grey with a row of black spots on its back, another row on its sides somewhat larger and white, edged black.

Length of one  $5\frac{1}{2}$  inches, of which the tail is 3.\*

Fam. SCINCIDÆ.

Gen. MOCOIA—Gray.

MOCOIA BILINEATA—Gray, Ann. Nat. Hist., Dec. 1846, p. 430.

Fronti-parietal plates two, separate; ears round, moderate, with two very indistinct minute scales in front; the drum sunken; scales 6 or 8 rowed, thin, smooth; above shining olive, whitish beneath, a dark broad line on each side from nostril to end of tail; two narrow dark lines on back from neck to end of tail. In the young and half grown animal, the tail is of a beautiful smalt or violet colour.

Length of one  $5\frac{1}{2}$  inches, of which the tail is  $3\frac{1}{2}$ .†

I have only found this Scink under stones on the summit of the Nilgherries. It appears very similar to *Lygosoma Dussumerii* of Dumeril and Bibron.

Gen. RIOPA—Gray.

RIOPA ALBOPUNCTATA—Gray, l. c.

Pale olive brown above, yellowish white beneath, sides of neck and body, purplish black, dotted with white. Length of one 4 inches, of which the tail is not quite 2.

This certainly looks very like the *Tiliqua pulchra* figured in Gray and Hardwicke's Illust. of Indian Zoology. I have found it in the Nellore district, where it is rare.‡

RIOPA PUNCTATA (L.)—Gray.

Length of one 9 inches, of which the tail is  $4\frac{3}{4}$ .

I have found this lizard both on the Eastern and Western Coasts of India under stones, or in the ground.

\* A specimen with tail imperfect was long ago presented by Mr. Jerdon to the Society's museum.—*Cur. As. Soc.*

† Remarkable for its *Riopa*-like proportions, and great length of tail; also for having four large acutely triangular præ-anal scales, with the points converging posteriorly.—*Cur. As. Soc.*

‡ The Society has lately received it from Mergui.—*Cur. As. Soc.*